AMENDMENTS TO THE CLAIMS:

Complete Claim Listing:

1. (Currently Amended) An apparatus for detecting a stall condition of a stepping motor of the type which includes at least first and second coils and a rotor having a plurality of magnetic poles therearound, said apparatus comprising:

a control circuit;

a current generator comprising a first switching circuit coupled to the control circuit and controlled thereby, the current generator for alternately supplying drive currents to said first and second coils causing the rotor to step, each of said first and second coils generating signals of alternating polarity when transitioning from a driven state to a non-driven state, said signals resulting from motion of said rotor;

a rectifying circuit coupled to the control circuit, the rectifying circuit for correcting the polarity of said signals;

a blanking circuit for masking an initial portion of each of said signals;

an integrator having an input coupled to receive said polarity corrected signals from the rectifying circuit and for generating an integrated version thereof; and

a comparator coupled to said integrator for comparing said integrated version with a predetermined threshold to detect the stall condition.

2. (Canceled)

3. (Canceled)

4. (Canceled)

5. (Canceled)

6. (Canceled)

7. (Currently Amended) An apparatus according to claim ~~6~~ 1 wherein said rectifying circuit comprises a second switching circuit coupled to said control circuit and controlled thereby.

8. (Original) An apparatus according to claim 7 wherein said blanking circuit comprises a third switching circuit coupled to said control circuit and controlled thereby.

9. (Currently Amended) An apparatus for detecting a stall condition of a stepping motor of the type which includes at least first and second coils and a rotor having a plurality of magnetic poles therearound, said apparatus comprising:

control means;

current generating means comprising switching means coupled to the control means and controlled thereby, the current generating means for alternately driving said first and second coils causing said rotor to perform a stepping rotation, each of said first and second coils generating a back emf voltage signal of alternating polarity when transitioning from a driven to a non-driven state due to the rotation of said rotor;

rectifying means coupled to the control means, the rectifying means for correcting the polarity of the back emf voltage signals;

blanking means for masking a predetermined initial portion of each of the rectified back emf voltage signals;

integrating means coupled to receive said polarity corrected back emf voltage signals to generate an integrated version thereof; and

~~detecting~~ comparison means coupled to said integrating means for ~~determining if~~ comparing said integrated version with a predetermined threshold to detect ~~is representative of~~ the stall condition.

10. (Canceled)

11. (Canceled)

12. (Canceled)

13. (Canceled)

14. (Currently Amended) An apparatus for displaying a measure of a variable, comprising;

a stepping motor, comprising:

at least first and second coils; and

a rotor having a plurality of magnetic poles therearound;

a display actuator coupled to said rotor for movement by said rotor to reflect a measure of said variable;

a control circuit;

a current generator comprising a switching circuit coupled to the control circuit and controlled thereby, the current generator for alternately supplying drive currents to said first and second coils causing said rotor to rotate by an amount indicative of the measure of said variable, each of said first and second coils generating signals of alternating polarity when transitioning from a driven to a non-driven state, said signals resulting from the motion of said rotor;

a rectifying circuit coupled to the control circuit, the rectifying circuit for correcting the polarity of said signals;

a blanking circuit for masking an initial portion of each of said signals;

an integrator having an input coupled to receive said polarity corrected signals and for generating an integrated version thereof; and

a comparator ~~detector~~ coupled to said integrator for comparing ~~determining if~~ said integrated version with a predetermined threshold to detect ~~is representative of~~ a stall condition.

15. (Canceled)

16. (Canceled)

17. (Canceled)

18. (Currently Amended) A method for detecting a stall condition of a stepping motor of the type which includes at least first and second coils and a rotor having a plurality of magnetic poles therearound, said apparatus comprising:

providing a current generator comprising a switching circuit coupled to a control circuit and controlled thereby, the current generator alternately driving said first and second coils to with drive signals to cause said rotor to rotate, each of said first and second coils generating emf signals of alternating polarity when transitioning from a driven to a non-driven state, said emf signals being caused by movement of said rotor;

rectifying said emf signals;

masking an initial portion of each of said rectified emf signals;

integrating the rectified emf signals; and

comparing ~~monitoring~~ the integrated emf signals with a predetermined threshold to detect a stall condition.

19. (Canceled)

20. (Canceled)